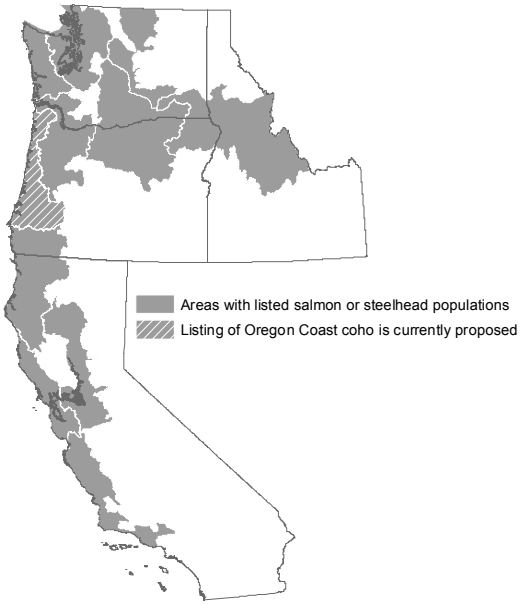
ESA Recovery Planning for Salmon and Steelhead
Questions & Answers
July 7, 2005

Q: What areas are affected by Endangered Species Act listings of salmon and steelhead?
A: Significant portions of Washington, Oregon, California, and Idaho are affected by ESA listing of salmon and steelhead (see map). ESA recovery plans will be developed for all of these areas. There are 26 distinct population segments, or evolutionarily significant units (ESUs), of salmon and steelhead listed under the ESA.

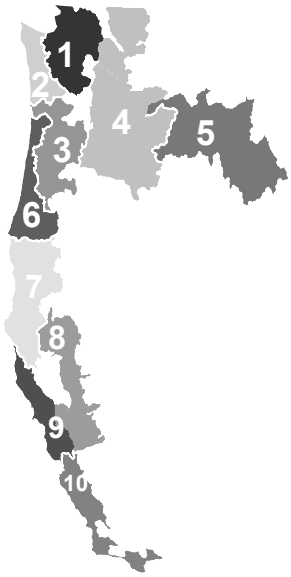


Q: What is the purpose of the ESA?
A: The primary purpose of the ESA is conservation of endangered and threatened species and the ecosystems upon which they depend. The ultimate goal of such conservation is the recovery of endangered and threatened species and their ecosystems so that they no longer need the protections afforded them under the ESA. The ESA provides a number of regulatory and planning tools to assist with this conservation goal. Among other things, the act requires the development of recovery plans for endangered or threatened species. These plans serve as an important tool to organize and guide the recovery process and ensure that recovery is achieved.

Q: What is a recovery plan?
A: The ESA and NOAA Fisheries Service recovery planning guidance require that recovery plans must: (1) assess the factors affecting the species; (2) identify recovery (delisting) goals; (3) identify the entire suite of actions necessary to achieve these goals; and (4) estimate the time and cost required to carry out these actions. Recovery plans are guidance documents, not regulatory documents. No agency or entity is required by the ESA to implement specific actions in a recovery plan. However, the ESA clearly envisions recovery plans as the central organizing tool for guiding recovery of listed species.

Q: What do we mean by recovery?
A: Recovery is the process by which the decline of an endangered or threatened species is arrested or reversed, and threats removed or reduced so that the species' survival in the wild can be ensured. The goal of the ESA is the recovery of listed species to levels where protection under that act is no longer necessary.

Q: How is NOAA Fisheries Service approaching recovery planning?
A: Recovery plans need to be scientifically credible and have the support, or "buy-in," of those who need to contribute to recovery. Recovery plans also need to be consistent with the agency's mandates to provide for sustainable fisheries and to meet our treaty and trust obligations to Native American tribes. NOAA Fisheries Service believes that it is critically important to ground the recovery planning process in the many state, regional, tribal, local, and private conservation efforts already underway throughout the region. The agency has established a recovery planning process to maximize local involvement and capitalize on ongoing efforts. To develop recovery plans that meet ESA statutory requirements as well as goals for local involvement, the Fisheries Service has organized the West Coast into 10 recovery areas, or "domains": Puget Sound; Willamette/Lower Columbia; Interior Columbia, which has 2 sub-domains–the mid/upper Columbia and the Snake; Oregon Coast; Southern Oregon/Northern California; North-Central California Coast; South-Central California; and California Central Valley (see map below).



Recovery Domains

1 – Puget Sound

2 – Southwestern Washington

3 – Willamette/Lower Columbia

4 – Interior Columbia, Upper/Mid Subdomain

5 – Interior Columbia, Snake Subdomain

6 – Oregon Coast

7 - Southern Oregon / Northern California Coast

8 - Central Valley

9 - North Central California Coast

10 - South Central California Coast

For each domain, a recovery plan will be developed that addresses all listed salmon and steelhead ESUs within that domain. A technical recovery team (TRT) has been appointed for most domains, composed of NOAA Fisheries Service scientists and technical experts from other entities. The TRTs will conduct technical analyses related to recovery goals and scenarios. To determine the actions that should be carried out to achieve the recovery goals, the agency will work with ongoing efforts in each domain to develop an appropriate policy and planning structure. Regardless of how the recovery planning process is structured, NOAA Fisheries Service will ensure that the time-frame, degree of confidence that the plan will achieve recovery, and economic cost for achieving recovery goals will be assessed for all recovery plans.

Q: What is the role of technical recovery teams (TRTs)?
A: Technical recovery teams (TRTs) have six to 10 scientists from NOAA Fisheries Service and other government and non-government entities. They have a mix of expertise in salmon biology, population dynamics, conservation biology, ecology, and other disciplines necessary for setting recovery standards and for measuring recovery efforts. TRT members are appointed by NOAA Fisheries Service once they have met screening criteria. All TRTs will be asked to identify the historical populations within each listed ESU, and to recommend population and ESU-level goals for de-listing. TRTs may also provide technical reviews of recovery plan products as they are developed by local groups or by NOAA Fisheries Service, identify factors for decline and limiting factors for each ESU, and identify research, monitoring, and evaluation needs.

The TRTs will work with teams of scientists from state, federal, tribal, and local agencies, and in concert with ongoing conservation planning efforts in each region. In some areas, state and tribal managers and others have already begun the work of establishing recovery goals. Where this work has already occurred, NOAA Fisheries Service intends that the TRTs will consider this work. There will be considerable opportunity for public involvement throughout the entire process, and TRT products will be peer-reviewed and distributed for public comment.

Q: What will recovery goals look like?
A: The ESA requires recovery plans to contain "objective, measurable criteria" for de-listing ("recovery goals"). Recent court decisions have established that these goals not only must address biological attributes of the species, but must also include goals related to the threats that caused the species to become listed. Pacific salmon will be determined to be delisted, or recovered, at the ESU scale, so recovery goals will be set at that scale. Many Pacific salmon ESUs are composed of multiple independent populations. For these ESUs, measuring the health or "viability" of the suites of independent populations and major population groupings can help determine viability of the ESU overall. Therefore, TRTs will provide recommendations for determining the viability of independent populations and major population groupings. Population-level goals will be expressed in terms of adult spawner abundance, productivity (population growth rate), spatial distribution, and genetic diversity. Because not every single population may need to be recovered to high levels of health, ESU criteria will provide a framework for deciding how many and which populations to recover to what levels of health. Goals related to threats that caused the species to be listed will address habitat degradation, harvest, disease and predation, regulatory mechanisms, and any other factors affecting the continued existence of the species.

Q: What constitutes a salmon population?
A: Even among biologists, the term "population" has been defined in a variety of ways. In its most general form, a population of salmon is defined as a group of fish of the same species that occurs in a given habitat. NOAA Fisheries Service defines a salmon population more specifically as a group of fish of the same species that spawns in a particular lake or stream at a particular season, and that does not interbreed substantially with fish from any other group spawning in a different place or in the same place at a different season. For salmonids, two groups are considered to be independent populations if their level of interbreeding does not substantially alter either group or affect their risk of extinction over a 100-year time-frame.

Q: What is an evolutionarily significant unit?
A: An evolutionarily significant unit (ESU) is a collection of one or more salmon populations that share similar genetic, ecological, and life history traits, but differ in important ways from salmon in other ESUs. Salmon ESUs are considered to be "distinct population segments" under the federal Endangered Species Act (ESA). Because a species, as defined in the ESA, can include subspecies, salmon ESUs can be listed under the ESA if they are threatened or endangered. Because the ESA does not explain or define how "distinct population segments" should be identified, NOAA Fisheries Service has developed a policy to do this for salmon based on the ESU concept.

Q: Who will write recovery plans?
A: NOAA Fisheries Service believes that it is critically important to ground the recovery planning process in the many state, regional, tribal, local, and private conservation efforts already underway throughout the region. The agency has established a recovery planning process to maximize local involvement and capitalize on ongoing efforts. In some cases, local and regional planning groups may write recovery plans with NOAA Fisheries Service participation. In other cases, local groups may write certain elements of recovery plans. In some cases, NOAA will write recovery plans. In all cases, we are seeking extensive local involvement in the process.

Q: Who will approve recovery plans?
A: NOAA Fisheries Service must approve recovery plans based on statutory requirements and any relevant regulations and agency guidance.

Q: Who else helps to recover salmon and steelhead?
A: Recovery depends on all individuals and entities whose actions have the potential to harm and conserve salmon, steelhead, and the ecosystems upon which they depend. There is no silver bullet or one answer to recovery. All sectors, including fish harvesters, land and water users, hatchery program managers, and others will need to do their part for recovery to occur. NOAA Fisheries Service is responsible for ensuring that recovery plans are developed and implemented. However, in many cases we do not have the authority to undertake many of the actions needed. Other federal agencies, state, local and tribal governments, local subbasin and watershed planning groups, and individual land and water users need to direct their efforts toward helping recovery in a coordinated manner.

Q: Why should I participate in recovery planning?
A: Implementation of recovery plans will help us halt and reverse the decline of listed salmon and steelhead throughout the Pacific Northwest and improve the status of listed ESUs to a point

where ESA protection is no longer necessary. By targeting resources at the greatest threats, recovery plans will also help ensure an efficient use of resources. Local participation in recovery planning increases local control over the actions that are incorporated into a plan. This, in turn, increases the likelihood of full implementation of the plan and will help us move faster toward recovery and de-listing of these valuable natural resources.

Q: Will participating in a recovery plan protect me from ESA regulatory actions? Can I get some kind of regulatory or other assurances for participating?
A: A recovery plan will outline the actions needed to achieve recovery. The recovery plan itself will not provide the regulatory assurance of compliance with the ESA. NOAA Fisheries Service will provide regulatory coverage through ESA Section 7 consultations, Section 10 permits, or 4(d) rules for actions that are directed toward implementing a recovery plan.

Assurances can take other forms in addition to the regulatory assurance mentioned above. Assurances can be provided in the form of NOAA support for funding priorities, statements of NOAA support for programs and actions, NOAA acceptance of state or local-level recovery guidelines, and NOAA's inclusion of local planning efforts into ESA recovery plans.